Upper Clark Fork River Basin Restoration Project Grant Amended Application

Bonner Pedestrian Bridge Project

Submitted by Missoula County

April 17, 2007

Step 1. Applicant Information and Project Summary Form

1. Name of Applicant(s) **Missoula County**

2. Project Title **Bonner Pedestrian Bridge Replacement**

3. Type of Entity* **County**

If the bridge is not replaced, it will become unstable for use following removal of the Milltown Dam.

4. **Description of Project Location** The Bonner Pedestrian Bridge is located over the Blackfoot River arm of the Milltown Reservoir, just upstream of the Milltown Dam. The bridge is within the Milltown Reservoir area, as defined in the Upper Clark Fork River Basin Restoration Plan Procedures and Criteria (RPPC), and within the BFR1 reach Restoration Project Area of the Restoration Plan for the Clark Fork River and Blackfoot River near Milltown Dam – October 2005 (State Restoration Plan).

5. Injured Natural Resource(s) and/or Impaired Services to be Restored, Rehabilitated, Replaced or Equivalent Acquired through Project. Removal of the existing pedestrian bridge and three concrete piers from the river bed will restore aquatic resources and riparian habitat. The current pedestrian bridge is a two span bridge with a concrete center pier in the middle of the river and will become unsafe once the Milltown Dam is removed. Two abandoned concrete piers remain in the river bed from a former three span bridge configuration at the site. The removal of the current bridge and all three concrete piers will allow restoration of a naturally functioning river channel as part of the restoration of the Clark Fork and Blackfoot Rivers following removal of the Milltown Dam. The existing bridge will be replaced with a three span pedestrian bridge with no piers constraining the river channel. Replacement of the bridge will maintain the baseline level of service to the local community, which would not be provided by the five foot walkway on the new highway 200 bridge. The highway 200 bridge walkway will not accommodate multiple uses. The bridge foundations will be located at the bridge approach sections, outside the 100-year floodplain, minimizing encroachment on the river at high flows. The center section of the three span bridge will include a modified section of one of the existing bridge trusses. The project will demonstrate a river-friendly option for replacement of aging bridges in the Clark Fork watershed. The new pedestrian bridge will link with planned pedestrian trails in West Riverside and Milltown and to the Bonner

School in Bonner. The replacement bridge will offer a more safe and desirable river crossing for local residents than the five foot pedestrian lane on the highway 200 bridge, replace the lost asset of the existing pedestrian bridge, while restoring the free flow of the Blackfoot River. The bridge will also coordinate and link with a new recreational trail and footbridge system as proposed by the Milltown Superfund Site Redevelopment Working Group and Missoula County. The trail system will be built in the restored Milltown Reservoir area, extending downstream to the Kim Williams Riverfront Trail system in Missoula, and upstream to the Turah Fishing Access site on the Clark Fork River and to the Weigh Station Fishing Access Site on the Blackfoot River. The architectural appeal and desirability of the 18 foot wide bridge deck in the center section of the bridge will enhance the recreational experience significantly for bridge users, especially as compared to crossing the river on a five foot walkway adjacent to the busy highway 200 bridge traffic.

6. Authorized Representative: **Barbara Evans, Chairman, Missoula County Commissioners**
(Name) (Title)

Mailing Address: **200 W. Broadway**
(Street/PO Box)

Missoula MT 59802 **406-258-4877**
(City/State/Zip) (Telephone)

Contact Person*: **Peter Nielsen Environmental Health Supervisor**
(Name) (Title)

Mailing Address*: **301 W. Alder**
(Street/PO Box)

Missoula MT 59802 **406-258-4968**
(City/State/Zip) (Telephone)

Funding Source		Amount in ($) Dollars					Matching Fund Percentage (Funding Source Total/Project Total)
		Commited Funds			Uncommitted Funds	Total	
		Grants	Non-Grant Funds				
			Cash	In-kind			
A.	UCFRB Restoration Fund	$ 975,652.00				$ 975,652.00	42.42%
B.							
C.	EPA	$ 500,000.00				$ 500,000.00	21.74%
D.	Fed Transportation bill	$ 824,348.00				$ 824,348.00	35.84%
E.							
F.							
G.							
H.							
I.							
Non-NRDP Totals		$ 2,300,000.00				$ 1,324,348.00	**57.58%**

8. Estimated Total Project Cost $2,300,000.00
(Automatically Calculated from spreadsheet above)

E-mail Address: nielsenp@ho.missoula.mt.us

9. Private (non-Governmental) Grant Applicant Financial Information – not applicable

10. Certification for Individuals or Public Entities – not applicable

11. Authorizing Statement

An authorized agent/agents representing the applicant must by his/her signature indicate that the application for funds and expenditure of matching funds, as represented, is officially authorized.

Grant Authorization

I hereby declare that the information included in and all attachments to this application are true, complete, and accurate to the best of my knowledge, and that the proposed project complies with all applicable state, local, and federal laws and regulations.

I further declare that, for **Missoula County**, I am legally authorized to enter into a binding contract with the State of Montana to obtain funding if this application is approved. I understand that the Governor must authorize funding for this project.

Missoula County _____

Project Sponsor Date

_____

Authorized Representative (signature) Title

Amended Proposal Abstract
Applicant Name: Missoula County Project Title: Pedestrian Bridge Replacement

Project Description, Changed Circumstances and Benefits to Restoration: Missoula County proposes to remove and replace a County-owned pedestrian bridge over the Blackfoot River arm of the Milltown Reservoir known as the Bonner Bridge, or locally as the Black Truss Bridge. The project will restore aquatic and riparian habitat resources. Replacement of the existing bridge will maintain the baseline level of transportation services for the local community. The project will also replace lost recreational resources by linking to pedestrian and recreational trails planned by the Milltown Superfund Site Redevelopment Working Group in the restored confluence area, Milltown, West Riverside, upstream to the Turah and Weigh Station Fishing Access sites, and to Missoula's Kim Williams Riverfront Trail. A $975,652 Restoration Grant was approved by Montana Governor Brian Schweitzer in December, 2006. After the grant approval, project circumstances changed with the State's decision to replace the Highway 200 bridge, downstream of the Bonner Pedestrian Bridge. The new Highway 200 bridge is expected to include a five foot wide pedestrian walkway. When the 2006 Restoration Grant for the Bonner Pedestrian Bridge was evaluated, it was assumed that there would be no pedestrian crossing available if the Bonner Pedestrian Bridge was removed and not replaced. This amended application addresses this change in circumstances.

When the Milltown Reservoir is drawn down by 29 feet in March, 2008 as part of Superfund site remediation, the river bed elevation will drop and reservoir sediments will be scoured from the bed of the Blackfoot River channel of the reservoir. As this occurs, the Bonner Bridge piers and abutments will be stressed due to increased river velocity, and may be undermined as the river cuts down to its new bed elevation, resulting in the need to replace the bridge if it is to provide for safe pedestrian passage over the Blackfoot River. The bridge must be removed, repaired or replaced before spring runoff, 2008 in order to avoid an unsafe condition or potential bridge failure.

Under the Milltown Reservoir Site Consent Decree, impacts to the Interstate 90 and Highway 200 bridges will be mitigated by the United States Environmental Protection Agency. Missoula County is responsible for costs associated with the Bonner Bridge. The County sought funds for replacing the bridge through the 2005 federal transportation bill. The bill included an appropriation of $5 million for pedestrian trails, footbridges and river access site improvements at or near the Milltown Dam site in Missoula County and Deer Lodge County. Because these funds will be split between the two counties, Missoula County must seek other funding sources for the projects it proposed for federal funding. The County has prioritized the Bonner Bridge replacement and construction of pedestrian trails in residential neighborhoods that will be impacted by heavy equipment traffic during Superfund remediation and restoration.

Removal of the existing pedestrian bridge and three concrete piers from the restored river bed will restore aquatic resources and riparian habitat and allow restoration of a naturally functioning river channel as part of the restoration of the Clark Fork and Blackfoot Rivers following removal of the Milltown Dam. The existing bridge will be replaced with a three span pedestrian bridge with no piers constraining the river channel. The center span of the new bridge would incorporate a modified section of one of the existing bridge trusses, and an 18 foot wide deck.

Total estimated project cost is $2,300,000. The County requests that the previously approved grant of $975,652 from the Natural Resource Damage Program remain available to the County.

Benefits of the proposed new pedestrian bridge, as compared to the walkway on the highway 200 bridge, include the following:

- Maintain a separate, multi-use bridge crossing
  - The new bridge would be suitable for multiple uses, including pedestrians, bicyclists, persons with disabilities and other non-motorized users. The new bridge would be 12-18 feet in width compared to 5 foot width of the walkway on

the highway 200 bridge. The 5 foot Highway 200 walkway would not be suitable for multiple uses.

- The new pedestrian bridge would provide a safer crossing of the river for pedestrians and other users by providing a greater separation from traffic on the highway 200 bridge.
- Improved aesthetics – The new pedestrian bridge would provide a much more pleasant experience crossing the river, where people will be able to hear and see the sights and sounds of the restored river without the distraction of heavy traffic on the highway 200 bridge.
- Superior connection to recreation trails in restored confluence – As a recreational trail connection, the separate pedestrian bridge will provide a much higher quality experience for recreational users of the trail system and proposed State Park and Interpretive Center near the restored confluence of the Blackfoot and Clark Fork Rivers. The 18 foot wide center section of the new bridge will include locations for viewing, sitting and ADA accessible fishing. The new bridge will also have a much greater architectural appeal, adding to the desirability of the pedestrian crossing linking the local community to the restored confluence and proposed State Park.

- Demonstrate restoration friendly design for replacement of historic bridge - through use of restoration program funds, the project will help demonstrate a method for replacing aging bridge structures with new bridges that retain historic elements and remove obstructions to natural processes in the river channel. These methods may be used for other bridges in the Clark Fork watershed.
- Encourage other bridge designs to benefit river restoration and recreation safety – Decisions are now being made by State and federal agencies on the design of highway mitigation work for the Highway 200 and Interstate 90 bridges. The design of the Bonner Pedestrian Bridge Project will provide a model, encouraging others to pursue designs that benefit river restoration and recreational safety.

TECHNICAL NARRATIVE

Applicant Name: Missoula County
Project Title: Bonner Pedestrian Bridge Replacement

PROJECT NEED/PROBLEM DEFINITION – no change from original application

Past Efforts to Address Project Needs – no change from original application

Project Goals and Objectives. (Objectives 8-13 added to the original application)

The Bonner Bridge Replacement Project will have the following goals:
1. Restoration of Aquatic resources through removal of the existing pedestrian bridge and three concrete piers from the river bed.
2. Replace the current bridge to maintain the baseline level of transportation service to the local community, with a new pedestrian bridge that will not constrict the river channel
3. Revegetate disturbed and non-disturbed areas within the County's 60 foot right of way, from the top to bottom of the pre-dam embankment. Revegetation will be consistent with and augment the State Restoration Plan for the Blackfoot River
4. Use durable and non-polluting materials for bridge construction to minimize need for long-term maintenance and potential for water pollution.
5. Substructure elements would be designed to provide minimum river flow restrictions and would not be affected adversely by riverbed scour. No future maintenance would be required for scour protection.
6. Provide connections to transportation and recreation trail projects in the local community, the restored confluence area, Bonner School, Kim Williams Riverfront Trail, and trails extending up the Blackfoot and Clark Fork Rivers.
7. Design and build the pedestrian bridge project in such a manner that it coordinates with and augments the goals and objectives of the State Restoration Plan, and the Superfund cleanup. This plan calls for the restored river channel to be approximately 175 feet in width at the location of the Bonner Bridge. If the center piers and abutment piers were left in place and fortified, the river would be significantly constrained. The total width of the Bonner Bridge is currently 400 feet. If the center pier and abutment piers were to remain in place, the restored river would either have to be engineered to remain in a channel on one side of the floodplain or constructed with a center pier within the river channel. These alternatives would conflict with the goals of the Draft Restoration Plan. Most importantly, the maintenance and fortification of the Bonner Bridge piers would conflict with the plan's Overall Project Goal, "Restore the confluence of the Blackfoot and Clark Fork Rivers to a naturally functioning, stable system." Maintaining the piers in place would also conflict with the Draft Restoration Plan's Goal number 3, "Provide high quality habitat for all native fishes and other trouts…", Goal number 4, "Provide functional wetlands and riparian communities…" and Goal number 6, "Provide safe recreational opportunities compatible with other restoration goals…"
8. Maintain a separate bridge crossing suitable for multiple uses including pedestrians, cyclists, persons with disabilities and other non-motorized users.
9. Provide a safe pedestrian crossing route, separated from highway 200 traffic.
10. Provide a pleasant river crossing for recreational users where people can experience the restored river without distractions of heavy traffic on highway 200.

11. Provide superior connection to the recreational trail system, proposed State Park and Interpretive Center near the confluence of the restored rivers.
12. Demonstrate river restoration friendly design for replacement of aging bridge structures.
13. Encourage other bridge mitigation projects on the Blackfoot River to use designs beneficial to river restoration and recreational use.

Alternatives Evaluated

Missoula County identified a preferred alternative in 2006, which included plans to demolish the existing through-truss bridge with all of its elements completely, remove the remnant piers of the bridge, and construct a new three span bridge in the current Bonner Bridge alignment.

While the removal alternative had many advantages for natural resource restoration, it would be a significant change for the local community. Some local residents have expressed concern about removal of the Bonner Bridge, due to its historic significance to the community. This concern was amplified for some people because it would occur at the same time that other community landmarks, the Milltown Dam and powerhouse, would also be removed within the next few years. After much additional thought and investigation, the County hired HDR Engineering to evaluate a new option for the three-span bridge design that would incorporate a section of the existing truss. This is known as the hybrid bridge design. This design is the county's preferred alternative. The restoration benefits of this design remain the same as the original proposal. The only change is to include a portion of the existing truss in the center section of the three span bridge. No additional funds are requested from the Natural Resource Damage Program. A detailed project scope, budget and schedule will be submitted to the program following approval of this amended application and the previously approved 2006 grant of $975,652.

An alternative pedestrian walkway design has been considered by the Montana Department of Transportation for the Highway 200 bridge. If the separate pedestrian bridge is not completed, MDT would likely construct two separate five foot walkways on each side of the new highway bridge. An option to construct a ten foot walkway on one side of the bridge has been considered, but is not currently planned due to funding and potential space limitations.

Natural Resource Restoration Benefits of the Project

Primary benefits of the project are the restoration of aquatic resources and riparian habitat. The removal of the current bridge and all three concrete piers will allow restoration of a naturally functioning river channel as part of the restoration of the Clark Fork and Blackfoot Rivers following removal of the Milltown Dam. Removal of two approach piers will further reduce the constriction of the river channel during high flow conditions.

By removing pier obstructions from the river channel and floodplain this alternative would allow the new river channel to be constructed under the natural design principles proposed by the State and Natural Resource Trustees as part of the State Restoration Plan. The river would not have to be locked into place on one side of the floodplain or the other, and maintained in that location

through the use of riprap, rock structures or other engineering controls. The river would be able to move naturally across the floodplain over time. Riparian vegetation and habitat would be maximized by providing the river access to the entire floodplain, free of obstructions, riprap and artificial structures.

The existing bridge will be replaced with a three span pedestrian bridge with no piers constraining the river channel. The bridge foundations will be located at the bridge approach sections, minimizing encroachment on the river at high flows.

Secondary Benefits of the Project

Secondary benefits of the project include provision of transportation and recreation services for the local community and visitors. As discussed earlier, the bridge will link to new pedestrian and recreational trails planned by the County and Redevelopment Working Group for local residents of West Riverside, Pinegrove, Marshall Grade, Milltown, Piltzville and Bonner. These include residential areas that will be affected by construction traffic during the remediation of the Milltown Reservoir beginning in late 2006. The bridge will also provide a critical link to a recreational trail system planned by the Redevelopment Working Group and County for the area following remediation and dam removal. This plan includes construction of additional recreation trail in the area and an additional footbridge located below the confluence of the two rivers and the current Milltown dam site, as originally proposed for federal transportation bill funding. The new trails would eventually link up with planned trails to be constructed in the second project phase, within the Milltown Reservoir remediation and restoration project area. These trails can not be constructed until remediation and restoration is complete, approximately five years from now. The trails would provide unique and exciting non-motorized recreation opportunities, linking to Missoula's riverfront trail system, the Bandmann Flats Golf Course, the Two Rivers Community Park, Turah Fishing Access Site, Bonner School and Weigh Station Fishing Access Site. The Weigh Station Access Site would be improved with boat ramp, toilets, parking and vegetation planting. New river access sites would be constructed near the Bonner Bridge and below the river confluence in the second phase of the project. The Bonner Bridge would provide a critical link to all of the resources, including access for local residents in Milltown and Bonner to new park, trail and river access facilities, and exciting loop trail opportunities linking to Missoula's Kim Williams Trail, the proposed interpretive center at the restored confluence, the Blackfoot River and upper Clark Fork River.

These secondary benefits would not be attained if the bridge was not replaced, and the only option for crossing the river would be the pedestrian lane adjacent to the highway 200 bridge. The separate bridge will provide a multi-use crossing, an aesthetically pleasing crossing with opportunities to linger at viewpoints with seating to view the restored river resources. The new bridge will also be more architecturally pleasing than the two-five foot walkway on the new concrete highway bridge. The new bridge will be a much more fitting component of the recreational trail system, connecting the local community to and providing loop trail opportunities within the restored confluence area and proposed State Park.

Removal of the center pier and abandoned piers would also benefit public safety. The piers would not remain in place and pose a threat to public safety for people who float the river in boats and inner tubes.

Removal of the piers would eliminate an obstruction to the passage of ice and debris during high flows, which could cause structural stability problems for the bridge, restored river channel or embankments bordering adjacent residential or commercial properties.

Project Schedule

The project would be initiated in mid 2007 with detailed engineering and project bidding activities. Bridge demolition would occur in fall 2007. The new bridge would be installed by February, 2008, prior to the removal of the Highway 200 bridge. This schedule will maintain pedestrian access across the river during construction on the highway 200 bridge. A detailed project timeline will be included with a detailed project scope, budget and schedule after approval of the previously approved grant by the Citizens' Advisory Council, Trustee Advisory Council and Governor.

Proposed Bridge Design

The proposed bridge design is combination of a prefab truss pedestrian bridge for the approach spans, and a center span comprised of a section of the existing truss bridge. Initial designs and cost estimates have been provided by HDR Engineering. The bridge deck would be Ipe hardwood, which will reduce long-term maintenance requirements and eliminate the need for wood treatment chemicals such as chromated copper arsenate or other copper derived treatments. Since the Superfund cleanup remedy at the Milltown site is intended to remove hazards to humans and aquatic life associated with copper and arsenic, it is particularly appropriate to avoid the use of these wood preservative substances for the new bridge.

Three Span Bridge Construction Procedure

The demolition and construction of the bridge would occur during Stage 2 drawdown for the Milltown Dam demolition work, when the water elevation in the BFR is approximately 16 feet below the current reservoir water elevation. In this condition most of the piers are inaccessible by land. Stage 2 drawdown is planned to begin in 2007, and extend through February, 2008.

The construction procedure will include a similar approach to that identified in the 2006 grant application. However, the existing truss bridge would be removed intact. Once on shore, the truss would be cleaned and modified to provide additional length sufficient to span the restored river floodplain. The center span of the new bridge would include the modified truss, with a new hardwood deck and railing. The deck width would be 18 feet, with several bump-outs for observation points and seating. We will investigate the possibility of constructing ADA compliant fishing access points. The approach spans would be pre-fab truss designs, similar to those proposed in the 2006 grant application. These approach spans would provide a 12 foot width, multi-use deck.

Streambank revegetation – no change from 2006 proposal

Streambanks and the right-of-way disturbed by removal and installation of the bridges will be restored using native plant species consistent with revegetation plans for the State Restoration Plan. Floodplain and riparian area revegetation will be completed by the Restoration Program when it completes restoration of the BFR 1 segment. The County will revegetate approaches and embankments consistent with the State's restoration plan, using native species. Public access to the river and footpaths on the east side of the bridge will be provided with a semi-primitive trail and steps constructed of rock, logs and other natural materials. This trail will direct public visitors down the slope without impacting restored vegetation.

Revegetation conducted under this project will occur within the County's 60 foot right of way extending on each bank from the upland area at the bridge terminus down the embankment to the 100 year floodplain. Restoration work below the 100-year floodplain will be conducted by the State of Montana as part of its restoration plan for the Blackfoot River. Revegetation work will include installing nine inch diameter rice straw erosion control contour waddles on the embankments across the steep portions of the 60 foot right of way at six foot intervals. Fine compost will be applied to the entire are to a thickness of approximately one quarter inch. A fast germinating native grass and forb seed mix will be applied, similar to the upland buffer zone seed mixes planned for use by the Restoration Program. One gallon shrubs will be planted on six foot centers. Shrub species may include willow, chokecherry, snowberry, mock orange, hawthorne, gooseberry and rose. Approximately 20 one gallon trees will also be planted outside a 10-15 foot buffer zone from the bridge. Tree species may include ponderosa pine and cottonwood. Woody debris will be scattered throughout the revegetation area to provide microsite diversity, and enhance erosion control and water retention. Shrubs and trees will be deep watered regularly throughout the growing season for a minimum of two years.

Project Staff

The project will be coordinated by Missoula County staff, including Public Works Director Greg Robertson, engineers Tim Elsea and Erik Dickson, and Environmental Health Supervisor Peter Nielsen.

Contracted Services Required for Project

Missoula County has contracted with a professional engineer to evaluate alternatives for the project, select a preferred alternative, develop cost estimates, and project engineering and construction management. When grant funds and federal transportation bill funds are available to the County, it will proceed with an open bid process for, procurement of the new bridge, demolition, disposal and new bridge installation services.

Qualifications of the Project Team

Greg Robertson, P.E. Missoula County Public Works Director
Tim Elsea, P.E., Assistant Director of Public Works

County Engineer Erik Dickson, P.E., Transportation/Bridge Engineer

All three have experience in design, construction and maintenance of bridges.

Peter Nielsen, M.S. R.S.

ENVIRONMENTAL IMPACT CHECKLIST AND NARRATIVE - No Change from 2006 proposal

CRITERIA STATEMENTS

Applicant Name: **Missoula County**

Project Title: **Bonner Pedestrian Bridge Replacement**

STAGE 1 GENERAL LEGAL CRITERIA

1. Technical Feasibility See Technical Narrative

2. Relationship of Expected Costs to Expected Benefits

The Bonner Pedestrian Bridge project will cost an estimated $2,300,000. Direct Benefits of the project include restoration of aquatic and riparian resources through removal of bridge piers that would obstruct the river and revegetation of disturbed and degraded streambanks. Indirect benefits include the retention and enhancement of a critical pedestrian travel route for local communities and linking of recreational trail systems providing public access to parks, restored areas, river access sites and neighboring communities. Other indirect benefits include the protection of streambanks on neighboring residential and commercial properties and restored areas from flood, ice and debris. Additional benefits include maintenance of a multi-use crossing, enhanced recreational benefits of the separate bridge and connections to the recreation trail system, and demonstration of a river restoration friendly design for replacement of aging bridges.

The Bonner Bridge project will make a significant contribution to the restoration of aquatic and terrestrial resources with the removal concrete piers from the river and the establishment of varieties of native plants on County owned land at and near the bridge site. The restoration benefits of the project will extend for some distance upstream and downstream of the immediate project area because the removal of piers from the river will allow restoration designers to use natural design principles and create a smooth transition between upstream and downstream reaches without routing the river through a heavily engineered channel under the bridge.

The public benefits of the project are substantial. It is difficult to quantify the value of a restored river, but Missoula County and the Missoula Superfund Site Redevelopment Working Group have concluded that the potential benefits are substantial. The Working Group and County have adopted a redevelopment plan for the Bonner and Milltown areas that is based upon the natural restoration of the Blackfoot and Clark Fork Rivers and development of publicly owned park, trails, footbridges, river access sites and a unique interpretive center at the restored river

confluence. After restoration is complete, the open space, wetlands, natural areas, trails, and new recreation opportunities will increase the value of nearby properties. Increases of 10-30% have occurred in similar "greenway developments" in other cities. The attractiveness of the restored greenway will bring new residents and businesses, all of which will contribute to a healthier local economy.

The project will maintain and enhance the pedestrian link between communities on both sides of the river. If the bridge is not replaced, it will become unstable for use following removal of the Milltown Dam. The Highway 200 Bridge will not accommodate a multi-use pedestrian lane. If the Bonner Bridge is not replaced following dam removal, there would be no multi-use travel link for residents of communities such as West Riverside and Pinegrove on the west side of the river to Milltown and Bonner on the east side. The separate pedestrian bridge would provide a safer crossing alternative than the two 5 foot walkways on the new highway 200 bridge, which would be adjacent to highway traffic. Of particular importance is the link for schoolchildren who attend the Bonner School (K-8). The most densely populated portion of the Bonner School District is located in the West Riverside and Pinegrove Areas, while the school is located in Bonner east of the river. If the bridge project prevents one serious injury or death of a Bonner School student or other local resident trying to cross the Highway 200 bridge, it will be well worth the cost. Replacement of the Bonner Bridge will provide very substantial and long-term benefits for families that need a safe pedestrian route for their kids to attend school.

The project will also have substantial benefits for outdoor recreation. It will link to a trail and footbridge system proposed by the Milltown Redevelopment Working Group and Missoula County. Partial funding for the first phase of this trail system has been received through the federal transportation bill and the U.S. Environmental Protection Agency. The trail system will link the Kim Williams Trail in Missoula's downtown riverfront to the restored confluence area and proposed park and interpretive center. The trails will extend through West Riverside, Milltown and Bonner, past the Bonner School and upstream to the Turah Fishing Access site on the Clark Fork River and the Weigh Station Access site on the Blackfoot River. An additional river access site is proposed adjacent to the Bonner Bridge on the west side of the river. Two other pedestrian bridges are proposed, one located below the current location of Milltown Dam and another about one mile upstream of the dam at a location known locally as the Duck Bridge. Funds are not requested from the upper Clark Fork Restoration Fund for the connecting trail projects as part of this application. But the Bonner Bridge replacement is critical to complete the trail system and provide access to the trail for local residents on both sides of the river.

The separate pedestrian bridge will provide a superior connection to this recreational trail system and the restored confluence area. The separate bridge will provide a multi-use crossing, an aesthetically pleasing crossing with opportunities to linger at viewpoints with seating to view the restored river resources. The new bridge will also be more architecturally pleasing than the two five foot walkways on the new concrete highway 200 bridge. The new bridge will be a much more fitting component of the recreational trail system, connecting the local community to and providing loop trail opportunities within the restored confluence area and proposed State Park.

3. Cost Effectiveness

Missoula County analyzed alternatives to the proposed project. These included repairing the existing bridge using its existing river piers, removing the bridge and constructing a pedestrian lane or accessory bridge on Highway 200 Bridge, replacing the existing bridge with a new two span bridge with new river pilings, and replacing the existing bridge with a new single span bridge or three span bridge. Several new bridge designs were considered, including a pre fabricated truss, cable stay and suspension bridge designs. The hybrid bridge design, incorporating a section of the existing truss, was evaluated most recently and is now the County's preferred alternative.

Replacement with a single span bridge or a three span bridge were the only alternatives that provided the natural resource benefits associated with removing all bridge piers from the river. Replacement with a new two span bridge with new center pier was the least expensive alternative considered. Because this alternatives conflict with goals of the Natural Resource Restoration Plan for the river, the Redevelopment Group and County propose to proceed with a replacement bridge alternative.

No Action Alternative

The "no action" alternative was considered but found unacceptable. If no action is taken to repair or replace the bridge, it will become structurally unstable and unsafe following removal of the Milltown Dam. If the bridge were removed and not replaced, it would eliminate a multi-use pedestrian river crossing for local residents and recreational visitors. If the bridge is not replaced, it would result in all pedestrian traffic using the walkways on highway 200, adjacent to highway traffic. This would be less safe than the separate bridge option. If the bridge was not replaced it would greatly diminish the unique qualities of the proposed trail and footbridge system proposed by the Redevelopment Working Group and the County.

Description of Options for Retaining Existing Structure – no change from 2006 proposal

Preferred Alternative

The preferred alternative is to demolish the existing through-truss bridge with all of its elements completely, remove the remnant piers of the bridge prior to the current bridge, and, using one of the existing trusses, construct a modified three span bridge in the current Bonner Bridge alignment. An approximate 222-foot center span would be built as the center section for the new bridge, providing ample room for the restored Blackfoot River channel. The center span would include a section of the existing bridge truss, and an 18 foot wide wood walkway. The approach spans would be 12 feet in width, accommodating multiple uses.

By removing pier obstructions from the river channel this alternative would allow the new river channel to be constructed under the natural design principles proposed by the State and Natural Resource Trustees as part of the draft Restoration Plan. The river would not have to be locked into place on one side of the floodplain or the other, and maintained in that location through the use of riprap, rock structures or other engineering controls. The river would be able to move naturally across the floodplain over time. Riparian vegetation and habitat would be maximized by providing the river access to the entire floodplain, free of obstructions, riprap and artificial

structures. The center pier would not remain in place and pose a threat to public safety for river recreation users. It would not provide an obstruction to the passage of ice and debris during high flows, or potentially trap such debris or ice causing structural stability problems for the bridge, restored river channel or embankments bordering adjacent residential or commercial properties. The three-span bridge design would also provide significant cost savings for the State Restoration Plan, since it would not require hard engineering to lock the river in place to protect the bridge.

4. Environmental Impacts NO RESPONSE REQUIRED

5. Human Health and Safety Impacts NO RESPONSE REQUIRED

6. Results of Superfund Response Actions

The Bonner Bridge mitigation is required as a direct result of Superfund remedy for the Milltown Reservoir site. When the Milltown Dam is removed, the bridge would become unstable and unsafe for pedestrian use. The project is intended to mitigate impacts to the bridge prior to spring runoff, 2008 when the existing bridge would be jeopardized by river bed scour. The project schedule includes a goal to complete installation of the new bridge prior to February, 2008 when the highway 200 bridge replacement project is initiated. This will maintain pedestrian passage across the river during the highway 200 project.

As previously discussed, the removal of existing bridge pilings and replacement of the Bonner Bridge with a new single span bridge without bridge pilings will coordinate with and substantially enhance natural resource restoration work planed by the State Restoration Plan.

7. Recovery Period and Potential for Natural Recovery – no change from 2006 application

8. Applicable Policies, Rules and Laws – no change from 2006 application

9. Resources of Special Interest to the Tribes and DOI – no change from 2006 application

STAGE 2 GENERAL POLICY CRITERIA

10. Project Location – no change from 2006 application

11.

12. Actual Restoration of Injured Resources – no change from 2006 application

13. Relationship between Service Loss and Service Restoration

A. Describe what services would be created or augmented by the proposal.

As a result of environmental injuries from mining and construction of the Milltown Dam, the Clark Fork and Blackfoot Rivers within the Milltown Reservoir Sediments Site have significantly degraded natural resources and provide very limited direct or indirect services to the public. Natural riparian habitats have been diminished. Riverine aquatic, wetland and riparian habitats have been eliminated by inundation in the reservoir and impacts of mining waste.

Recreational use is extremely limited in the reservoir. Fishing, floating, birdwatching, walking and other forms of trail use are absent from most of the reservoir area.

B. Describe how the services that would be created or augmented by the proposal restore, rehabilitate, replace or represent the acquisition of equivalent services lost as a result of injury to the natural resource.

This project seeks to restore and rehabilitate the natural resources such that tangible and intangible assets are available to the public. First and foremost, the proposed restoration project will enhance recovery of natural habitat to support fish, wildlife and plants. When restored, the river corridor will be able to support services lost, such as fishing opportunities, wildlife viewing, and open space enjoyment. These public services or benefits, derived from the restored natural resources, are becoming increasingly important, particularly as access to alternatives is becoming more and more limited.

The recreational benefits derived through connection to the proposed trail and river access system will benefit public health. Opportunities to enjoy the outdoors are an important part of life in Montana, and the proposed project and coordinated trails and river access projects will replace an opportunity that was eliminated in the past due to the environmental damages. The health benefits of recreation are well documented, and the citizens of Milltown, Bonner, West Riverside and surrounding communities can look forward to receiving those benefits through their active use of the trail and river access system. These recreational benefits would not be attained through connection of the trail system and proposed state park to the highway 200 bridge and its walkway.

13. Public Support

Public support for this project and coordinated trail and river access projects has been strong. The Milltown Superfund Site Redevelopment Working Group proposed that the Bonner Bridge be repaired or replaced as part of its Redevelopment Plan for the Confluence of the Blackfoot and Clark Fork Rivers and surrounding communities, in January, 2005. Two public open houses were held in Bonner and Missoula to solicit public comments on the proposed redevelopment plans. More than 150 people attended each open house, and written comments were received. The trail and footbridge projects in the plan received very strong support from open house attendees, and were the most popular aspect of the proposed redevelopment plan.

The Redevelopment Working Group discussed options for repairing or replacing the bridge throughout the summer and fall, 2005. The Working Group represents a broad range of local residents, interest group and stakeholders in the local community and County at large. After much consideration, the group reached a consensus recommendation to replace the current bridge with a new bridge that spans the river floodplain.

The Bonner School has been particularly strong in its support for replacing the bridge with a new bridge that will provide service to the community for the long term.

Many local residents have expressed a desire to retain the existing truss bridge. In response, the County has proposed the hybrid bridge design, which would incorporate the truss into the center

section of the bridge, while retaining the natural resource benefits of the project. The hybrid design has received strong public support. The County has held a community open house to accept comments on the project, and has also taken public comment at a meeting of the redevelopment working group. More than 70% of the comments received at the open house supported the hybrid bridge design.

Letters of support for the project are attached, or will be supplied at a later date.

14. Matching Funds and Cost Sharing

Missoula County proposes to provide matching funds in the amount of $1,324,348, or 57.6% of total project costs.

15. Public Access – no change to 2006 proposal

16. Ecosystem Considerations – no change to 2006 proposal

17. Coordination and Integration

Coordination with transportation and recreational trail, footbridge and park development projects is an important aspect of the project. Project scheduling and provision of alternate pedestrian access across the Blackfoot will require careful coordination with construction schedules and activities associated with the Highway 200 and Interstate 90 bridges. A primary goal will be to complete installation of the new bridge prior to February, 2008 when the Highway 200 bridge replacement project is initiated.

Secondary benefits of the project include provision of transportation and recreation services for the local community and visitors. The project will maintain the baseline level of transportation service to the local community. As discussed earlier, the bridge will link to new pedestrian trails planned by the County and Redevelopment Working Group for local residents of West Riverside, Pinegrove, Marshall Grade, Milltown, Piltzville and Bonner. These include residential areas that will be affected by construction traffic during the remediation of the Milltown Reservoir beginning in late 2006. The bridge will also provide a critical link to a recreational trail system planned by the Redevelopment Working Group and County for the area following remediation and dam removal. This plan includes construction of recreation trail in the area and an additional footbridge located below the confluence of the two rivers and the current Milltown dam site, as originally proposed for federal transportation bill funding. The new trails would eventually link up with planned trails to be constructed in the second project phase, within the Milltown Reservoir remediation and restoration project area. These trails can not be constructed until remediation and restoration is complete, approximately five years from now. The trails would provide unique and exciting non-motorized recreation opportunities, linking to Missoula's riverfront trail system, the Bandmann Flats Golf Course, the Two Rivers Community Park, Turah Fishing access Site, Bonner School and Weigh Station Fishing Access Site. The Weigh Station Access Site would be improved with boat ramp, toilets, parking and vegetation planting. New river access sites would be constructed near the Bonner Bridge and below the river confluence in the second phase of the project. The Bonner Bridge would provide

a critical link to all of the resources, including access for local residents in Milltown and Bonner to new park, trail and river access facilities, and exciting loop trail opportunities linking to Missoula's Kim Williams Trail, the proposed interpretive center at the restored confluence, the Blackfoot River and upper Clark Fork River.

18. Normal Government Functions – no change to 2006 proposal

Step 6. Proposal Budget

A. BUDGET ESTIMATE A revised budget, project scope and schedule will be submitted to the program following approval of this amended application.

B. BUDGET NARRATIVE
Applicant – Missoula County
Project Title – Bonner Pedestrian Bridge

B. A revised budget, project scope and schedule will be submitted to the program following approval of this amended application.